

# **EXHIBIT A**

EXCERPT

June 26, 2009

Mr. William Creal  
Chief, Water Bureau  
Michigan Department of Environmental Quality  
PO Box 30273  
Lansing, MI 48909

Re: DWSD Permit Modification Request  
Permit No. MI0022802

Dear Mr. Creal:

The Detroit Water and Sewerage Department (DWSD) respectfully requests that a modification of its NPDES permit (Permit No. MI0022802) be processed to revise the requirements relating to two major capital improvements because of the City's current financial condition. Specifically, we request that the requirement to construct the new Detroit River Outfall (DRO-2) be eliminated because of the City's financial constraints so that a less costly substitute project can be developed to provide disinfection to the current discharge at Outfall 050 (the Rouge River Outfall). We also request that the requirement to construct the 201 million gallon Upper Rouge CSO Storage Tunnel be deleted so that less costly CSO control alternatives can be evaluated. Additional information explaining the proposed changes is included below and a redline markup of the current NPDES permit showing the proposed modification is attached for reference.

#### **BASIS FOR PROPOSED PERMIT MODIFICATION**

As noted in our previous meetings and discussions, Detroit is experiencing unprecedented financial problems as a result of the recent economic downturn. Documentation describing Detroit's current financial crisis is included as Attachment 1 to this application. This material includes the completed worksheets from EPA's "Financial Capability" guidance document which demonstrate that Detroit is experiencing economic hardship as measured by federally recognized criteria. Supplemental information relating to specific economic indicators in the Detroit area is also included to document the current financial crisis.

As you know, the current NPDES permit allows the City to request a permit modification due to "technical or financial constraints" (Part I.A.13.d.8). While the term "financial constraint" is not specifically defined in the permit, the information provided in Attachment 1 shows the extreme financial distress being experienced by Detroit. We believe that these economic problems constitute a "financial constraint" pursuant to the NPDES permit.

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#### **DETROIT RIVER OUTFALL (DRO-2)**

The current NPDES permit requires Detroit to construct a new 20 foot diameter outfall tunnel from the wastewater treatment plant under Zug Island to a discharge located approximately 250 feet off-shore in the Detroit River. Although DWSD initially planned to construct the new outfall using a state-of-the-art pressurized Tunnel Boring Machine (TBM), the construction contract was terminated on April 14, 2009 because of the high cost of the project.

DWSD has tentatively identified an alternative outfall configuration which, if acceptable, is expected to result in significant cost savings, while still achieving the permit requirement to disinfect the wet weather discharges from Outfall 050 to the Rouge River. Further evaluation of this alternative configuration is needed to assess potential water quality and dissolved oxygen impacts in the lower portion of the Rouge River, and to evaluate hydraulic and geotechnical factors associated with construction of the new facility. The proposed permit modification includes a schedule for completing the water quality impact evaluation and then proceeding with preparation of the Basis of Design report and final plans and specifications for the project.

Assuming that the existing Rouge River Outfall will remain in use while the alternative outfall configuration is developed, an additional adjustment is requested to one of the current effluent limits at Outfall 050. Specifically, we request that the effluent limit for cyanide be revised to "amenable cyanide" as opposed to "available cyanide". Prior NPDES permits established cyanide limits based on "Amenable Cyanide", and compliance with that limit was not a problem. However, when the permit was revised to regulate "available cyanide", this resulted in periodic exceedances. The predominant source of cyanide in the wastewater system is from a coke manufacturing facility whose discharge includes a significant amount of iron cyanide. However, these iron cyanide compounds are not problematic from a toxicity standpoint. DWSD has also required the coke making facility to upgrade its treatment process to include a Biological Treatment System, and this is expected to result in reduced cyanide contributions in the future.

#### **UPPER ROUGE CSO TUNNEL (URT)**

The current NPDES permit requires DWSD to construct CSO control facilities to reduce combined sewer overflows to the Rouge River to no more than one event per year on average by constructing a tunnel with a storage capacity of at least 201 million gallons. DWSD has designed a tunnel system which includes a seven mile long, 30 foot diameter tunnel along with drop shafts, connecting adits, and near surface modifications, with an estimated construction cost of \$880 million. The first construction contract (PC-764) was awarded, but was subsequently terminated by DWSD on May 29, 2009 due to the City's financial problems.

DWSD is now in the process of re-evaluating CSO control options in an attempt to identify a less costly solution which can be built without exceeding its financial capability. DWSD is requesting that the permit be modified to establish a schedule for completing the evaluation of CSO control alternatives. It is envisioned that this evaluation will address various technologies

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including tunnels, retention basins, vertical shafts, screening and disinfection systems as well as green infrastructure and low impact development options, consistent with the April 30, 2009 letter from MDEQ Director Steve Chester.

## CONCLUSION

DWSD respectfully requests your review and approval for the proposed permit modifications relating to the Detroit River Outfall and the Upper Rouge CSO Tunnel based on the City's current financial problems. We would be happy to meet with you to discuss this request in detail or provide additional information for your review. Enclosed with this application is a check in the amount of \$750.00 to cover the permit application fee.

Very truly yours,

Detroit Water and Sewerage Department

Pamela Turner  
Interim Director

## Attachments

Cc: Mr. S. Chester, MDEQ Director  
Mr. M. Bray, MDEQ Permits Section  
Mr. P. Argiroff, MDEQ Southeast Michigan District Office  
Mr. S. Kuplicki, DWSD Assistant Director  
Mr. R. Shukla, DWSD Assistant Director  
Mr. R. Hinshon, Hinshon Environmental Consulting  
Mr. M. Jacobs, Dykema Gossett  
Mr. B. Foster, The Foster Group  
Mr. T. O'Brien, TOB Consulting  
Mr. T. Lewand, Bodman Longley

## ATTACHMENT 1

### FINANCIAL CAPABILITY AND ECONOMIC HARDSHIP INFORMATION

This document provides information on the financial capability of the City of Detroit to undertake certain capital improvement projects required under its NPDES permit. This analysis has been conducted consistent with EPA's publication on financial capability ("Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development;" February, 1997, USEPA 832-B-97-004), plus supplemental information on other factors which collectively demonstrate the severity of Detroit's economic condition.

With regard to the EPA Financial Capability Guidance document, DWSD has prepared ten worksheets extracted from that document with statistical information and data for various factors identified by EPA as the key indicators for determining financial capability. The information from these ten worksheets was then evaluated using the "Financial Capability Matrix" which reflects residential impacts (cost per household as a percent of Median Annual Household Income) and permittee financial capability (socioeconomic, debt and financial indicators). Using EPA's scoring system, Detroit's financial capability is rated as the most severely impacted sector of the matrix, and is officially classified as "High Burden".

The financial capability worksheets from the EPA guidance document are based on information relating to the City of Detroit. This reflects the constraints imposed upon the City of Detroit for financing capital improvements based on federal court orders which stipulate that the City of Detroit retail customers are responsible for 83% of the cost of CSO control projects, including the Upper Rouge CSO Storage Tunnel, which is the subject of DWSD's permit modification request. Similarly, the allocation of the capital cost for the proposed new Detroit River Outfall (DRO-2) is based on flow as mandated by Rate Settlement Agreements and federal regulations. It should be noted that the Michigan Constitution, as interpreted in the Bolt v. City of Lansing, also supports this allocation method since it is consistent with the principle that infrastructure fees be borne by those receiving service. Since the cost of these capital improvement projects is not uniformly distributed and cannot lawfully be adjusted, it is necessary to examine the impact of the capital cost by user class in determining hardship.

The attached EPA financial capability worksheets include property tax data as one of the factors for determining hardship, even though that information is not relevant to Detroit's situation. The EPA guidance assumes that property taxes are a potential funding source for capital improvement projects, but this is not the case for DWSD. The Detroit Water and Sewerage Department does not have the ability to levy property taxes, and its infrastructure costs are solely supported by rates, with large capital improvements typically being funded through revenue bonds. EPA's consideration of property tax information underscores the importance of conducting the evaluation based on the specific user class for the hardship as discussed above, since the City of Detroit has no power to levy such taxes outside the City.

In recognition of the limited relevance of some of the EPA financial indicator criteria, DWSD has also compiled supplemental information which further demonstrates the severity of the current financial crisis which the City is facing. This supplemental information shows current and projected future trends on factors such as population, employment and manufacturing, housing, water sales and future revenues, and prior expenditures.

As is evident from the EPA financial capability worksheets and the supplemental economic information, Detroit is clearly experiencing a severe hardship and has limited financial capability to proceed with certain capital improvements. This constitutes a basis for requesting a modification of the NPDES permit to revise the requirements for several new capital improvement projects.

DET.Attachment 1 to permit modif request 6.23.09.doc